

REMARKS

Claims 1-6, 10-16 and 20-44. Applicant appreciates the indication of allowability of claims 23, 26, 29 and 32.

Amendments

The claims are amended to replace the term television program with the term video program. The independent claims are also amended to remove references to transmitting metadata to an end user. No new matter is added.

Response to rejections

The following sections address the rejections of each of the independent claims. The examiner is requested to allow all claim in view of the distinctions between the claims and the cited art that are pointed out below.

Claims 1-6, 10-16 and 20

Independent claims 1 and 11 were rejected under 35 USC §102(e) as being anticipated by Tash (U.S. 7,036,138). In order to support an anticipation rejection, the cited art must embody each and every element of the claim exactly. The following distinctions show that claims 1 and 11 and their dependent claims are not anticipated by Tash.

Claims 1 and 11 describe a method or device whereby metadata that describes the subject matter of a video program is generated. The metadata is generated from production system data received from a production system. The metadata is generated by assigning scores to categories based on the production data, and assigning keywords based on the production data.

Tash describes a system that receives program objects (for example, from a national television network) and schedules them for broadcast. The system chooses program objects to broadcast to viewers based on their content, and may emphasize certain types of programs (e.g., sports programs).

The rejection asserts that Tash teaches the receipt of production data from a production system, citing 8:10-33. The cited passage does not meet the claim language. The cited passage describes a server that receives program objects and their metadata. The cited passage states; “Each incoming object preferably includes a set of meta-data that describes the incoming object in terms of, among other things, a set of content properties” (8:26-29). The present claim describes the generation of metadata, and production data is what that metadata is generated from. Simply receiving metadata that already exists does not satisfy the claim, which states that production data is received, and later states that metadata is generated from that production data. Therefore this claim limitation is not met by the reference.

The rejection asserts that Tash teaches assigns numerical goodness of fit scores to respective predefined categories based on analysis of the production data to describe the subject matter of the television program, where the scores represent the degree to which the category is descriptive of the subject matter of the video program, citing 14:46-55 and Table 2. The cited passage and table do not meet the claim language. The cited passage describes importance scores that are assigned to categories by the system for the purpose of indicating which types of programs should be emphasized in the broadcast schedule. The complete discussion that leads to the cited passage begins at 13:54, which states that each program object is assigned to one or more content classes to maintain a variety of objects in the object schedule. After explaining the category structure, it is stated that “It is often desirable to weight some of the classes more heavily than others. For example, more users may be interested in football than hurling” (14:9-11). The assignment of scores to categories is then discussed, culminating in the cited passage, which discusses the mathematical operations used to determine the importance of a particular category relative to other categories, as illustrated in Table 2. The point of this discussion is that the system assigns scores to categories to indicate which types of programs should be emphasized in the broadcast schedule. These scores are not part of the metadata for any individual video program, and they are not assigned as part of a process for generating metadata for a video program. The claim language at issue requires numerical scores to be assigned to categories based on analysis of production data to describe the subject matter of the television program. This claim limitation is not met by the reference.

The rejection asserts that Tash teaches assigning keywords to the video program based on analysis of the production data, citing 16:8-31. The cited passage does not meet the claim

language. The cited passage describes that each object may have class attributes and values. The attributes and values are defined similar to the attributes and values for the classes (16:11-12). The attributes and values for the classes are discussed in the previous paragraph beginning at 15:52. That discussion, referring to Figure 6, states that “The values associated with each attribute may identify sub-classes or categories.” In other words, the cited passage states that program objects may have categories and sub-classes associated with them. The claim language at issue requires the assignment of keywords to a video program based on analysis of production data. The cited passage does not involve the assignment of keywords to a program, or any aspect of creating metadata, and so the claim limitation is not met by the reference.

This analysis shows that there are major differences between the cited reference and the claims. Therefore claims 1 and 11 and their dependent claims cannot be anticipated by the reference. These claims also cannot be obvious from the reference, as there is no teaching or suggestion of the missing features in the reference.

Claims 2 and 12 were rejected as being obvious over Tash in view of Sumita (U.S. 6,581,207). Sumita does not teach or suggest the features already shown to be absent from Tash. Therefore, even assuming that Sumita teaches the features for which it is relied upon in the rejection, claims 2 and 12 are still not obvious over the combination of references.

Claims 21-34

Independent claims 21 and 27 were also rejected as being anticipated by Tash. In order to support an anticipation rejection, the cited art must embody each and every element of the claim exactly. The following distinctions show that claims 21 and 27 and their dependent claims are not anticipated by Tash.

Claims 21 and 27 describe a process or device for creating metadata for a programming event that involves obtaining production data from a production system, determining candidate keywords, putting those candidate keywords into a classification tool that generates, for each candidate keyword, a set of scores associated with categories, and selecting keywords from among the candidates based on those category scores.

The rejection asserts that Tash teaches the receipt of production data from a production system, citing 8:10-33. This assertion was addressed above and it was shown that Tash does not meet this claim feature.

The rejection asserts that Tash teaches determining candidate keywords from production data, citing 8:25-33. The cited passage was addressed above and does not meet the claim language. The cited passage describes a server that receives program objects and their metadata. The cited passage states; "Each incoming object preferably includes a set of meta-data that describes the incoming object in terms of, among other things, a set of content properties" (8:26-29). The present claim specify that production data for a programming event is received, and candidates for keywords to be used in the metadata for that programming event are determined from the production data. Simply receiving metadata that already exists does not satisfy this requirement of the claim. Therefore this claim limitation is not met by the reference.

The rejection asserts that Tash teaches providing the candidate keywords as inputs to a classification tool and generating for each candidate a set of numerical goodness of fit scores each corresponding to a category, citing 14:46-55 and Table 2. The cited passage and table were addressed above and do not meet the claim language. The cited passage and table describe importance scores that are assigned to categories by the system for the purpose of indicating which types of programs should be emphasized in the broadcast schedule. There is no classification tool that assigns scores to categories based on a received keyword, and there is no generation of metadata, of which the claim limitation at issue is one aspect. Therefore this claim limitation is not be by the reference.

The rejection asserts that Tash teaches selecting keywords from among candidate keywords based on the scores generated for categories as described above. The rejection cites 15:52-16:31 as teaching this feature. The cited passage was addressed above and does not meet the claim language. The cited passage describes that each object may have class attributes and values. The attributes and values for the classes are discussed beginning at 15:52. That discussion, referring to Figure 6, states that "The values associated with each attribute may identify sub-classes or categories." In other words, the cited passage states that program objects may have categories and sub-classes associated with them. The claim language at issue requires that, having already assigned scores to categories for a set of candidate keywords, particular keywords are now chosen based on their particular scores. The cited passage does not involve candidate keywords, or the selection of particular candidates from among a set of keywords based on scores associated with the keywords. Therefore this claim limitation is not met by the reference.

This analysis shows that there are major differences between the cited reference and the claims. Therefore claims 21 and 27 and their dependent claims cannot be anticipated by the reference. These claims also cannot be obvious from the reference, as there is no teaching or suggestion of the missing features in the reference.

Claims 22, 24, 28 and 30 were rejected as being obvious over Tash in view of Sumita (U.S. 6,581,207). Sumita does not teach or suggest the features already shown to be absent from Tash. Therefore, even assuming that Sumita teaches the features for which it is relied upon in the rejection, claims 22, 24, 28 and 30 are still not obvious over the combination of references.

Claims 35-44

Independent claims 35 and 40 and their dependent claims were rejected as being anticipated by Tash. The rejection simply refers back to the rejection of claim 1 and states that the claims are rejected on the same ground, with the added note that the differences between claim 1 and claim 35, namely the processing of metadata for a video program do determine individual segments of the program, is also taught by Tash, citing 6:9-14. The anticipation rejection of claim 1 was addressed above, and claims 35 and 40 are distinguished from Tash on the same grounds. Regarding the reference to 6:9-14, this passage merely states that a broadcast news studio may produced news segments. There is no discussion of the determination of individual segments through processing of production data for a program as a whole. Therefore this claim limitation is also not met by Tash.

Thus claims 35-44 are not anticipated by Tash.

Conclusion

The foregoing amendments and remarks address all bases for objection and rejection and are believed to place the case in condition for allowance. The examiner is invited to contact the undersigned to resolve any remaining issues.

Respectfully submitted,

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